

REMARKS

Claims 84 through 93 are pending in this application. Claim 84 is amended herein. New claims 92 and 93 are added herein. Support for the amendment to claim 84 may be found at page 9, lines 6, 7, and 8 and page 29, lines 11-14 of the specification, and in Fig. 7. Support for new claims 92 and 93 may be found at page 11, lines 16 and 17 of the specification.

Reconsideration of this application in view of the foregoing amendments and the following remarks is respectfully requested.

Claim Rejections - 35 U.S.C. § 102:

Claims 84 through 91 were rejected under 35 U.S.C. § 102(b) as anticipated by Northrup *et al.*, US 5,639,423. The rejection is traversed to the extent it might apply to the claims as amended.

Claim 84 recites:

"an ultrasound transducer disposed movably on said reaction chamber."

Northrup neither teaches, discloses, nor suggests an ultrasound transducer disposed *movably* on a reaction chamber, as recited in claim 84. In Northrup, rather, the transducers are micro-fabricated in the walls of the device itself, as shown in Figs. 3, 4E, 4F, and 5, and are thus incapable of movement. In particular, as described at column 9, lines 36-41,

"top left and right transducers 60tl and 60tr, bottom left and right transducers 60bl and 60br, top left and right four-contact resistance monitoring leads 67tl and 67tr, and bottom left and right four-contact resistance monitoring leads 67bl and 67br are then patterned onto the device."

Since the transducers are patterned *onto* the device, they are not disposed *movably*, as recited in claim 84.

Additionally, as described at column 9, lines 65, 66, and 67, "FIG. 5 depicts a view of the bottom of the chamber 30 subsequent to the deposition of the transducers 60bl and 60br" Since transducers 60bl and 60br are *deposited* on the bottom of the chamber 30, transducers 60bl and 60br are not disposed *movably*, as recited in claim 84.

Furthermore, as described at column 10, lines 28-31,

"As shown in FIGS. 3 and 4(f), a bottom piezoelectric layer 62b extending between and covering leads 67bl and 67br, fingers of the bottom transducers 60bl and 60br, and portions of leads 56bl and 56br is then deposited and patterned."

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Since a bottom piezoelectric layer 62b extending between and covering leads 67bl and 67br, fingers of the bottom transducers 60bl and 60br, and portions of leads 56bl and 56br are *deposited* and *patterned*, transducers 60bl and 60br are not disposed *movably*, as recited in claim 84.

Finally, as described at column 10, lines 32-36,

"Similarly, a top piezoelectric layer 62t extending between and covering leads 67tl and 67tr, fingers of the bottom transducers 60tl and 60tr, and portions of leads 56tl and 56tr is then deposited and patterned."

Since a top piezoelectric layer 62t extending between and covering leads 67tl and 67tr, fingers of the bottom transducers 60tl and 60tr, and portions of leads 56tl and 56tr are *deposited* and *patterned*, transducers 60tl and 60tr are not disposed *movably*, as recited in claim 84. Claim 84 is submitted to be allowable. Withdrawal of the rejection of claim 84 is earnestly solicited.

Claims 85 through 91 depend from claim 84 and add further distinguishing elements. Claims 85 through 91 are also submitted to be allowable. Withdrawal of the rejection of claims 85 through 91 is earnestly solicited.

New Claims 92 and 93:

New claims 92 and 93 depend from claim 84 and add further distinguishing elements. New claims 92 and 93 are also submitted to be allowable.

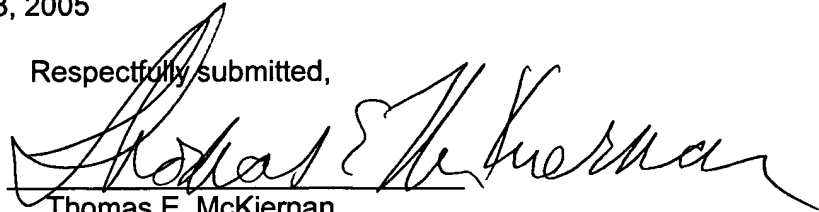
Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all claims 84 through 93 are allowable over the cited references. Allowance of all claims 84 through 93 and of this entire application are therefore respectfully requested.

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Respectfully submitted,

By

A handwritten signature in cursive script, appearing to read "Thomas E. McKiernan", written over a horizontal line.

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